IN THE CLAIMS

The following listing of the claims is provided in accordance with 37 C.F.R.
§1.121.

1.   (Original) A method for servicing an imaging device having a cryogenic
cooling system, comprising:

receiving first data representative of at least one condition of the cryogenic cooling
system;

receiving second data correlative of the at least one condition to an imaging device
event; and

developing a projection regarding possible occurrence of the imaging device event
with respect to the imaging device via the first and second data.

2.   (Original) The method as recited in claim 1, comprising developing the
projection via a model.

3.   (Original) The method as recited in claim 1, comprising receiving data
representative of a plurality of conditions of the cryogenic cooling system.

4.   (Original) The method as recited in claim 1, comprising scheduling service
for the imaging device based upon the projection.

5.   (Original) The method as recited in claim 1, comprising requesting service
of the imaging device based upon the projection.

6.   (Original) The method as recited in claim 1, comprising estimating an
interval of time until the possible occurrence of imaging device event in the imaging device
via the projection.

7.   (Currently Amended) A computer ~~program~~ readable medium comprising code for servicing an imaging device having a cryogenic cooling system, the computer ~~program~~ readable medium being located on one or more tangible media, comprising:

code for receiving first data representative of at least one condition of the cryogenic cooling system;

code for receiving second data correlative of the at least one condition to an imaging device event; and

code for developing a projection regarding possible occurrence of the imaging device event with respect to the imaging device via the first and second data.

8.   (Original) A service scheduling system for use with an imaging device having a cryogenic cooling system, comprising:

means for receiving first data representative of at least one condition of the cryogenic cooling system;

means for receiving second data correlative of the at least one condition to an imaging device event; and

means for developing a projection regarding possible occurrence of the imaging device event with respect to the imaging device via the first and second data.

9.   (Original) A method for servicing a cryogenic cooling system, comprising:

receiving first data representative of at least one parameter related to the cryogenic cooling system;

receiving second data correlating the first data to a model time interval related to a possible occurrence of a cryogenic cooling system event; and

determining a probabilistic time interval until the possible occurrence of the cryogenic cooling system event in the cryogenic cooling system via the second data.

10.   (Original) The method as recited in claim 9, comprising requesting service of the cryogenic cooling system such that the service occurs prior to lapse of the probabilistic time interval.

11.   (Original) The method as recited in claim 9, comprising coordinating maintenance of a further system such that maintenance of the further system occurs prior to lapse of the probabilistic time interval.

12.   (Original) The method as recited in claim 9, comprising coordinating routine maintenance of at least one of the cryogenic cooling system and a further system to occur prior to lapse of the probabilistic time interval.

13.   (Original) The method as recited in claim 12, comprising coordinating service of the cryogen cooling system with the routine maintenance of at least one of the cryogenic cooling system and the further system.

14.   (Original) The method as recited in claim 9, wherein the at least one parameter relates to a heating element of the cryogenic cooling system.

15.   (Original) The method as recited in claim 9, wherein the at least one parameter relates to cryogen pressure with respect to the cryogenic cooling system.

16.   (Currently Amended) A computer ~~program~~ readable medium comprising code for servicing a cryogenic cooling system, the computer ~~program~~ readable medium being located on one or more tangible media, comprising:

        code for receiving first data representative of at least one parameter related to the cryogenic cooling system;

        code for receiving second data correlating the first data to a model time interval related to a possible occurrence of a cryogenic cooling system event; and

code for determining a probabilistic time interval until the possible occurrence of the cryogenic cooling system event in the cryogenic cooling system via the second data.

17.   (Original) A service scheduling system for use with a cryogenic cooling system, comprising:

means for receiving first data representative of at least one parameter related to the cryogenic cooling system;

means for receiving second data correlating the first data to a model time interval related to a possible occurrence of a cryogenic cooling system event; and

means for determining a probabilistic time interval until the possible occurrence of the cryogenic cooling system event in the cryogenic cooling system via the second data.

18.   (Original) A method for developing a probabilistic model of a cryogenic cooling system event, comprising:

collecting a first set of condition data from a population of cryogenic cooling systems;

analyzing the first set of condition data to produce correlated data correlating the first set of condition data to occurrences of a cryogenic cooling system event in the population of cryogenic cooling system; and

analyzing the correlated data to produce a model for providing a projection for a possible occurrence of the cryogenic cooling system event in a further cryogenic cooling system based upon the correlated data and a second set of condition data from the further cryogenic cooling system.

19.   (Original) The method as recited in claim 18, wherein the condition data relates to a heater duty cycle at the cryogenic cooling system.

20.   (Original) The method as recited in claim 18, wherein the cryogenic cooling system event is a loss of superconductivity in a magnet of the cryogenic cooling system.

21.   (Original) The method as recited in claim 18, wherein the projection includes a time interval until the possible occurrence of the cryogenic cooling system event in the further cryogenic cooling system.

22.   (Original) The method as recited in claim 21, comprising determining a maintenance schedule for the further cryogenic cooling system based upon the time interval until the possible occurrence of the cryogenic cooling system event in the further cryogenic cooling system.

23.   (Currently Amended) A computer ~~program~~ readable medium comprising code for developing a model for serving of a cryogenic cooling system, the computer ~~program~~ readable medium being located on one or more tangible media, comprising:
        code for collecting a first set of condition data from a population of cryogenic cooling systems;
        code for analyzing the first set of condition data to produce correlated data correlating the first set of condition data to occurrences of a cryogenic cooling system event in the population of cryogenic cooling system; and
        code for analyzing the correlated data to produce a model for providing a projection for a possible occurrence of the cryogenic cooling system event in a further cryogenic cooling system based upon the correlated data and a second set of condition data from the further cryogenic cooling system.

24.   (Original) A scheduling system for a cryogenic cooling system, comprising:
        means for collecting a first set of condition data from a population of cryogenic cooling systems;
        means for analyzing the first set of condition data to produce correlated data correlating the first set of condition data to occurrences of a cryogenic cooling system event in the population of cryogenic cooling system; and

means for analyzing the correlated data to produce a model for providing a projection for a possible occurrence of the cryogenic cooling system event in a further cryogenic cooling system based upon the correlated data and a second set of condition data from the further cryogenic cooling system.

25.   (Original) A method for developing a probabilistic model of an imaging device event in an imaging device having a cryogen cooling system, comprising:

collecting a first set of data from a population of imaging devices, wherein the first set of data contains information regarding the condition of the cryogenic cooling systems of the population of the imaging devices;

collecting a second set of data from the population of imaging devices, wherein the second set of data contains information regarding occurrences of imaging device events in the population of the imaging devices;

analyzing the first and second sets of data to produce correlated data correlating the first and second sets of data; and

analyzing the correlated data to produce a model for providing a projection of the possible occurrence of the imaging device event in a further imaging device based upon the correlated data and a third set of data from the cryogenic cooling system of the further imaging device.

26.   (Currently Amended) A computer ~~program~~ readable medium comprising code for developing a probabilistic model for servicing an imaging device having a cryogenic cooling system, the computer ~~program~~ readable medium being located on one or more tangible media, comprising:

code for collecting a first set of data from a population of imaging devices, wherein the first set of data contains information regarding the condition of the cryogenic cooling systems of the population of the imaging devices;

code for collecting a second set of data from the population of imaging devices, wherein the second set of data contains information regarding occurrences of imaging device events in the population of the imaging devices;

code for analyzing the first and second sets of data to produce correlated data correlating the first and second sets of data; and

code for analyzing the correlated data to produce a model for providing a projection of the possible occurrence of the imaging device event in a further imaging device based upon the correlated data and a third set of data from the cryogenic cooling system of the further imaging device.

27.　　(Original) A scheduling system for an imaging device having a cryogenic cooling system, comprising:

means for collecting a first set of data from a population of imaging devices, wherein the first set of data contains information regarding the condition of the cryogenic cooling systems of the population of the imaging devices;

means for collecting a second set of data from the population of imaging devices, wherein the second set of data contains information regarding occurrences of imaging device events in the population of the imaging devices;

means for analyzing the first and second sets of data to produce correlated data correlating the first and second sets of data; and

means for analyzing the correlated data to produce a model for providing a projection of the possible occurrence of the imaging device event in a further imaging device based upon the correlated data and a third set of data from the cryogenic cooling system of the further imaging device.